

Amendments to the Claims

1. (Original) An isolated and purified nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO: 1.
2. (Original) The nucleic acid molecule of claim 1 wherein the nucleic acid molecule is RNA.
3. (Original) The nucleic acid molecule of claim 1 wherein the nucleic acid molecule is DNA.
4. (Original) An expression vector, wherein said vector comprises a nucleic acid sequence set forth in SEQ ID NO: 1.
5. (Original) A recombinant host cell comprising the expression vector of claim 4.
6. (Original) A canine Cathepsin S protein, in substantially pure form comprising the amino acid sequence set forth in SEQ ID NO: 2.
7. (Canceled).
8. (Canceled).
9. (Original) A process for expression of canine Cathepsin S protein in a recombinant host cell, comprising:
 - a) transferring the expression vector of claim 4 into suitable host cells; and
 - b) culturing the host cells of step (a) under conditions which allow expression of the canine Cathepsin S protein from the expression vector.
10. (Currently amended) A method of identifying compounds that modulate canine Cathepsin S protein activity, comprising:
 - a) combining a compound suspected of being a modulator of canine Cathepsin S protein activity with canine Cathepsin

S protein having an amino acid sequence corresponding to
SEQ ID NO: 2; and

b) measuring an effect of the compound on protease activity
of the canine Cathepsin S protein.

11. (Currently amended) The method of claim 10, wherein the effect of
the modulator on the protein is inhibiting ~~or enhancing~~ cysteine
protease activity.

12. (Canceled).

13. (Canceled).